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XXX.—*A Synopsis of the Fissirostral family Bucconidæ.*

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THOUGH Brisson (to whose exact descriptions the greater part of the species of birds contained in the last edition of the 'Systema Naturæ' are referred) gives several members of his genus *Bucco*, Linnæus adopted but one of them, founded on the bird denominated '*Bucco*' *par excellence* by the former author, and to which the latter added the erroneous specific term *capensis*. This *Bucco capensis* therefore—however far in accordance with the views of modern systematists we subdivide the family to which it belongs—in whatever way we arrange the birds with which others have associated it—must always be retained as the type species of the Linnæan genus *Bucco*.

Gmelin and Latham made large additions to Linnæus's solitary species, uniting, as Brisson did before them, in *their* genus *Bucco* members of two very different families—that is, of the present fissirostral true *Bucconidæ*, and of the scansorial family *Capitonidæ*, between which and the *Bucconidæ* there has been continual confusion even up to the present day.

Cuvier in his 'Tableau Élémentaire d'Histoire Naturelle' (1798-99), was the first to recognise the necessity of a separation between the *Barbus* of the old world and those of the new. For the former scansorial group he suggested the restriction of the French term *Barbu*; and proposed the name *Tamatia* for the new world *B. capensis* and its allies. Here we have the first traces of the *heresy* afterwards so widely spread, of using the Linnæan title *Bucco* for a group of birds with which Linnæus himself was perfectly unacquainted.

In 1806 Le Vaillant published the second volume of his magnificent work the 'Histoire Naturelle des Oiseaux de Paradis,' which contains a monograph of the *Barbus*. These he divides into three sections:—

1. *Barbus* proprement dits (i. e. *Capitonidæ*).
2. ——— *Tamatias* (i. e. *Bucco*, Linn.)
3. ——— *Barbacous* (i. e. *Monasa*, V.) } (*Bucconidæ*.)

In the correctness of these divisions we see how far in advance Le Vaillant was of preceding authors, and have to lament that from his having used only French terms in his writings, others, who merely latinized his names, have obtained the credit of being the authors of many scientific discoveries which are rightly due to him alone.

Neither Illiger nor Vieillot kept clearly apart the *Bucconidæ* and *Capitonidæ*, though the latter in his 'Analyse' (1816) first formed the important genera *Monasa* for Le Vaillant's *Barbacous*, and *Capito* (with the type *B. cayanensis*), from which (as the earliest proposed genus in the family) the *Capitonidæ* take their name.

Temminck however employed *Capito* for the fissirostral *Bucconidæ*, and *Bucco* for a genus of *Capitonidæ*, exactly reversing the correct use of these two names. His example was followed by Wagler, Swainson, and other writers. Wagler in his 'Systema Avium,' 1827, gives an excellent monograph of the two genera *Bucco* and *Monasa*, under the titles *Capito* and *Lypornix*. He includes 14 species in these genera; Le Vaillant in 1806 had given only 7; we are now acquainted with more than 30, an illustration of the rapid progress lately made in the extension of the number of species of birds.

To Mr. G. R. Gray is due the credit of proposing to restore to the present family the Linnæan appellation *Bucco*; correcting in this, as in many other instances, the inaccurate practice of using generic names in different senses to those originally attached to them by their first founders. In his 'Genera of Birds' he makes the present group the first subfamily of *Alcedinidæ*, under the title *Bucconinæ*, or Puff-birds. The scansorial *Buccones* of Temminck and others he places under the term *Capitoninæ*, or Barbets, as the first subfamily of *Picidæ*. The only alteration I venture to suggest to this arrangement is to raise both these groups to the rank of families, retaining them respectively among the *Fissirostres* and *Scansores*, in the places assigned to them by Mr. Gray. The peculiar structure of the feet and eccentric habits of the Puff-birds are, I think, sufficient to warrant our doing this in their case, and what we know of the mode of life of the Barbets seems also to favour the idea of their being constituted a distinct family of *Scansores**.

* Mr. Wallace tells me that the *Capito amazoninus* (?) observed by him at Guia, on the Rio Negro, feeds on fruit, and seems like a little Toucan in its habits.

I have thought it necessary to make the preceding remarks in order to vindicate the usage of the name *Bucconidae* for the present family; the Prince of Canino having in his 'Conspectus Generum Avium,' notwithstanding Mr. G. R. Gray's before-mentioned corrections, continued the terms *Bucco* and *Capito* in their respectively perverted senses,—precisely the opposite to those assigned to them by their original propounders.

The members of the family *Bucconidae* are inhabitants of the most tropical portion of the new world, ranging from about 15° N.L. to 30° south of the equator, and not passing the ridge of the Andes as far as I am aware.

The generic divisions hitherto established among the *Bucconidae* and their types are as follows:—

Bucco, Linn.

B. collaris, Lath.

Tamatia, Cuv.

T. macrorhyncha (Gm.).

Chaunornis, G. R. Gray.

C. tamatia (Gm.).

Cyphos, Spix.

C. macrodactylus, Spix.

Malacoptila, G. R. Gray.

M. fusca (Gm.).

Nonnula, Selater.

N. rubecula (Spix).

Monasa, Vieill. (*Lypornix*, Wagl. *Scotocharis*, Gloger.

Monastes, Nitzsch.)

M. atra (Bodd.).

Chelidoptera, Gould. (*Brachypetes*, Sw.)

C. tenebrosa (Pall.).

Of these divisions I propose to adopt only four, namely *Bucco*, *Malacoptila*, *Monasa*, and *Chelidoptera*, as truly generic; the others may be placed at the head of different subsections to mark out slighter differences, in the manner adopted by Mr. G. R. Gray in his recently published Catalogues of the British Museum.

In the first genus, *Bucco*, with fifteen species, the gonys is always curved upwards from the base towards the apex; the upper mandible, which is strongly hooked over the under, is deeply

channelled in the interior, and often bifid at the extremity. The plumage is black and white, varied with brown, and generally with bars or spots upon the breast. In the first sections of the genus the bill is excessively dilated laterally at the base; in the latter section in several species, on the other hand, much compressed.

In the next genus, *Malacoptila*, the gonys is nearly straight, with a slight curve downwards at the extremity. The upper mandible is gradually curved into a point over the under, and has not the fierce hook observable in the former genus. I am acquainted with eleven species of this genus: the additional one here given (the *inornata* of Du Bus) may possibly be the same as one of the others. The plumage is generally brown, more or less striated with lighter shades, and frequently with a gular or super-pectoral uniform patch. The rectal and mental bristles are strong and largely developed, the latter forming a striking character in several species.

The third genus, *Monasa*, with four species at present known, contains the largest birds in the family. The plumage is dull lead-coloured or blackish, the bill bright red or yellow. The upper and under mandibles are regularly curved downwards. The tail is much lengthened. The spiny processes at the carpal joint, which are present, I believe, all through this family, are principally noticeable (as being most developed) in the genus *Monasa*.

In the fourth and last genus, *Chelidoptera*, the wings are much longer than in the preceding genera, and are evidently formed for rapid flight. The tail is quite short and nearly square. The plumage is *Monasa*-like, but relieved by a brown patch on the belly.

I may observe that, I have worked into the present synopsis all the synonyms I have been able to discover as having been applied to members of the present family, except one, to wit *Capito senilis*, Tschudi, Av. Consp. 301, et Fauna Per. p. 259, founded on *Bucco senilis*, Pöppig, a MS. name in the Leipsic Museum. As no description has ever been published of this species, the name is of no authority, and need not be noticed. Indeed I hardly know whether the bird referred to belongs to this family or the *Capitonidæ*.

Genus I. *Bucco*.

A. *Bucco*, Linn.

1. *Bucco collaris*, Lath.

Bucco, Brisson, Orn. iv. p. 92.

Bucco capensis, Linn. S. N. i. 168; Gm. S. N. i. 406.

— *collaris*, Lath. Ind. Orn. i. 202; Vieill. Enc. Meth. p. 1420; Gray's Gen. p. 74; List of B. M. pt. 2. sect. 1. p. 47.

Capito collaris, Temm. Tabl. Meth. p. 41; Wagler, Syst. Av. sp. 3; Tsch.

Av. Consp. p. 300; Tsch. F. P. p. 259; Bp. Consp. p. 146.

Tamatia collaris, Less. Man. d'Orn. p. 167.

Le Tamatia à collier de Cayenne, Pl. Enl. 395.

Le Tamatia à collier noir, Le Vail. Ois. de Par. ii. t. 42.

B. supra ferrugineus, tenuissime nigro lineatus: vitta dorsali nigra, supra ochracea marginata: subtus albescens; vitta pectorali nigra; ventre fulvescentiore: rostro rubro, culmine nigro: pedibus flavidis.

Long. tota 7·0; alæ 3·1; caudæ 3·5.

Hab. in Cayenna; Guiana (Le Vail.); Rio Negro (Wallace); Peruv. reg. sylv. (Tsch.).

This well-known bird is, as I have mentioned before, the only species of Linnæus's genus *Bucco*. It was erroneously called *capensis* by him, which renders it necessary to adopt for its name Latham's appellation *collaris*. Cayenne specimens occur in most collections. Le Vaillant says it is also to be found in Guiana, though Richard Schomburgk does not include it in his catalogue of birds in the third volume of his 'Reisen in British Guiana.' It extends across the branches of the Rio Negro (whence examples were brought by Mr. Wallace) into the wood region of the Peruvian provinces bordering on Brazil, where it was found by Dr. Tschudi.

B. *Tamatia*, Cuv.

2. *BUCCO MACRORHYNCHUS*, Gm.

Barbu à gros bec de Cayenne, Buff. Pl. Enl. 689.

Bucco macrorhynchus, Gm. S. N. i. 406; Lath. Ind. Orn. i. p. 203; Vieill.

Nouv. Dict. d'H. N. iii. 240; Vieill. Enc. Meth. p. 1420; Schomb.

Reisen, iii. 719; Gray's Gen. p. 74; Gray's List of B. M. p. 47.

Capito macrorhynchus, Wagl. Syst. Av. sp. 1; Tsch. Av. Consp. p. 300; Tsch.

F. P. p. 259; Bp. Consp. p. 146.

Cyphos macrorhynchus, Strickl. Ann. Nat. Hist. vi. 418.

Tamatia à plastron noir, Le Vail. Ois. de Par. ii. t. 39.

B. supra niger, torque, collari et fronte latissime albis: subtus albus; vitta lata pectorali nigra; ventris lateribus nigro conferte radiatis; rostro pedibusque nigris.

Long. tota 10·0; alæ 4·5; caudæ 3·5.

Hab. in Cayenna, Surinamo (Le Vail.); Guiana (Schomb.); Para, fl. Amazon, Rio Negro (Wallace); Honduras (Dyson); Peruv. reg. sylv. (Tsch.).

This is the largest species of the genus and one of the earliest known. It appears to be rather widely distributed, since I cannot find any real difference between Honduras examples collected by Mr. Dyson and those from the Amazons. Schom-

burgk says it is one of the rare birds of British Guiana, and he met with only a few individuals on the Canuku mountains. It seems more common on the Amazon, where many specimens have been lately collected by Messrs. Hawxwell and Wallace. Dr. Tschudi found it in Cis-andean Peru, in the provinces bordering on Brazil. The feathers of the back and wings, except the primaries, are narrowly edged with white, the rectrices slightly tipped with white. My measurements are taken from a full-sized individual. Younger birds are rather smaller, the bill considerably inferior in size, and the white front much narrower. The breast band is broader in some examples than in others.

3. *BUCCO SWAINSONI*, G. R. Gray.

Tamatia macrorhynchus, Sw. Zool. Ill. (1821-22) t. 99.

Bucco Swainsoni, Gray's Gen. p. 74; Gray's List of B. M. p. 47.

Capito Swainsoni, Bp. Consp. p. 146.

B. *supra niger*, fronte et vitta subnuchali albis: subtus albus; vitta pectorali nigra; abdomine fulvo: rostro et pedibus nigris.

Long. tota 9·0; alæ 4·1; caudæ 3·0.

Hab. in Brasil. Merid.

This South Brazilian representative of the preceding species was figured by Mr. Swainson in his 'Zoological Illustrations' under the name of its prototype. To Mr. Gray belongs the credit of distinguishing it therefrom and naming it after its first describer. It may be easily recognized by its smaller size, weaker bill and fulvous vent. My specimens are from Rio de Janeiro, I believe. The bird is to be found in most collections, more commonly even than the true *macrorhynchus*.

4. *BUCCO PECTORALIS*, G. R. Gray.

Bucco pectoralis, Gray's Gen. p. 74. pl. 26; Gray's List of B. M. p. 41.

Capito pectoralis, Bp. Consp. p. 146.

B. *niger æneo tinctus*; regione auriculari et nucha late albis: subtus albus vitta pectorali latissima nigra; ventre medio crissoque albis, lateribus nigrescentibus: rostro pedibusque nigris.

Long. tota 8·0; alæ 3·8; caudæ 3·0.

Hab. in America Meridionali.

The nuchal collar extending from eye to eye and the broad pectoral band render this species easily recognizable. The British Museum type-specimen is unique, as far as my experience goes.

5. *BUCCO ORDII*, Cassin.

Bucco Ordii, Cassin, Pr. Ac. Sc. Phil. 1851, p. 154. pl. 8.

I am only acquainted with this species from Mr. Cassin's original notice of the type-specimen, which is in the Museum of the Academy of Natural Sciences of Philadelphia. He describes it as follows:—

“*Form.*—Generally short and robust; feathers of the head but little elongated, wings and tail short. A strict congener of *B. macrorhynchus* and *pectoralis*.

“*Dimensions.*—Total length $7\frac{3}{4}$; wing 3·3; tail 2·8.

“*Colours.*—Tail with a central transverse white bar. Breast with a narrow band of black, immediately succeeded by another much wider of dark chestnut-brown; throat and abdomen white, which is the colour also of the frontal feathers and of the internal webs of the primaries at their bases, and of a narrow collar on the back of the neck. Entire superior surface of the head, body, wings and tail black, with a greenish gloss. Tail with a band of white most observable on the inner webs of the feathers and narrowly edged with white at its end. Flanks striped with the same dark brown as the broader belt of the breast.

“*Hab.* Venezuela.

“*Obs.*—A bird resembling generally the several species of which *B. macrorhynchus* is a representative, but immediately recognizable by the white in its tail, and its smaller size. I have seen only the specimen now described.”

This bird appears certainly quite distinct from any other of the genus.

6. *BUCCO TECTUS*, Bodd.

Barbu à poitrine noire de Cayenne, Buff. Pl. Enl. 688. fig. 2.

Bucco tectus, Boddaert, Tabl. d. Pl. Enl. p. 43.

Bucco melanoleucus, Gm. S. N. i. 406; Lath. Ind. Orn. i. p. 203; Vieill.

Nouv. Dict. d'H. N. iii. 241; Enc. Meth. p. 1420; Licht. Verz. d. Doubl. p. 8.

Capito melanoleucus, Wagl. S. A. sp. 2; Bp. Consp. p. 146.

Bucco tectus, Gray's Gen. p. 74; Gray's List of B. M. p. 47.

Le petit Tamatia à plastron noir, Le Vail. Ois. de Par. ii. t. 40.

B. supra niger, capite albo punctulato, alis albo variis: striga oculari alba: fascia caudali media et altera terminali alba: sub-tus albus vitta pectorali lata nigra; rostro pedibusque nigris. Long. tota 6·0; alæ 2·9; caudæ 2·0.

Hab. in Cayenna, Surinamo et Guiana (Wagl.); Para (Wallace).

This is the smallest of the five species of *pied Barbets* we are at present acquainted with, and to be recognized at once by the round white spots on the head, which are not found in any of the preceding.

Its range is from Guiana southwards, as far as the banks of the Amazon, where Mr. Wallace collected specimens.

C. *Chaunornis*, G. R. Gray.

7. *BUCCO TAMATIA*, Gm.

Barbu à ventre tacheté de Cayenne, Buff. Pl. Enl. 746. fig. 1.

Bucco tamatia, Gm. S. N. i. 405; Lath. Ind. Orn. i. p. 202; Vieill. Gal. des Ois. pl. 34; Enc. Meth. p. 1421; Licht. Verz. d. Doubl. p. 8; Schomb. Reisen, iii. p. 719; Gray's Gen. p. 74; Gray's List of B. M. p. 48.

Capito tamatia, Wagl. Syst. Av. sp. 6; Steph. Gen. Zool. xiv. 156; Temm. Tabl. Meth. p. 41.

Tamatia maculata, Cuv. Règn. An. (1817) i. p. 429; Sw. Orn. Draw. pl. 11.

Nyctactes tamatia, Strickl. Ann. Nat. Hist. vi. 418.

Chaunornis tamatia, Gray, List of Gen. (1841) p. 13.

Tamatia tamatia, Bp. Consp. p. 146.

Le Tamatia à gorge rousse, Le Vail. Ois. de Par. ii. t. 41.

B. supra fuliginoso-brunneus, rufescente plus minusve transversim lineatus: fronte supercilliisque ferrugineo tinctis: striga utrinque suboculari in torquem nuchalem obscure producta alba: collo antico ferrugineo vitta nigra utrinque marginato: ventre maculis nigris conferte transvittato: rostro pedibusque nigris.

Long. tota 6·2; alæ 3·0; caudæ 6·5.

Hab. in Guiana (Le Vail.) (Schomb.); Cayenna; Para et fl. Amazonum (Wallace).

This species appears to me to be closely allied in shape and structure to the preceding, although some authors have made it the type of a different genus. Schomburgk found it in the deepest woods of British Guiana, where, he says, "it seems to have an extensive range. They are seen in solitary spots, and sit alone, more rarely in pairs, phlegmatic and sorrowful-looking upon the branches of the low bushes. They are by no means shy, and let one approach within six or eight steps, when they fly a little way farther and resume again their sorrowful melancholy position. Their food is insects." It extends thence down to the banks of the Amazon, where it was procured by Mr. Wallace.

8. *BUCCO RUFICOLLIS* (Wagler).

Capito ruficollis, Wagl. Isis 1829, p. 658; Bp. Consp. p. 146.

Bucco ruficollis, Gray's Gen. p. 74.

Tamatia gularis, d'Orb. and Lafr. Rev. Zool. 1838, p. 166.

Bucco gularis, Gray's Gen. p. 74.

Capito gularis, Bp. Consp. p. 146.

B. fuliginoso-brunneus; torque cervicali postico, loris et regione auriculari albis: dorso et alarum tectricibus albo mixtis: subtus albidus; gutture medio rufo; vitta pectorali nigra:

ventre medio paululum rufescente, lateribus nigro maculatis :
rostro pedibusque nigris.

Long. tota 8·5 ; alæ 3·5 ; caudæ 3·3.

Hab. in Nova Grenada ; Carthageria (Lafr.) ; Santa Martha
(Verreaux) ; Mexico (Wagl.) (?).

An accurate description of this bird was first given by Wagler in the 'Isis,' in one of the papers which he called "Beitrage und Bemerkungen zu dem ersten Bande seines Systema Avium." MM. de Lafresnaye and d'Orbigny named it afresh in an article upon some birds from Carthageria, in the 'Revue Zoologique,' in 1838. An example in the Munich Museum is labelled as from Cayenne. The brothers Verreaux have lately received several skins of this species from their collector at Santa Martha, which is on the coast-line some distance to the east of Carthageria and on the opposite side of the Magdalena. I expect, therefore, that the northern coasts of the New Grenadian republic will be found to constitute its true *habitat*, and should rather doubt its extending so far as Mexico, whence Wagler's specimens were said to have come.

In general distribution of colours it rather resembles *B. macrodactylus*, but is twice the size. It may be easily recognized by the large rufous patch in the middle of the throat and well-defined black breast-band.

9. BUCCO BICINCTUS (Gould).

Tamatia bicincta, Gould, Pr. Zool. Soc. 1836, p. 80.

Tamatia bitorquata, Sw. An. in Men. p. 327.

Bucco bicinctus, Gray's Gen. p. 74 ; Gray's List of B. M. p. 48.

Capito bicinctus, Bp. Consp. p. 146.

B. nigro-fuliginosus, fulvo mixtus : fronte auribus mentoque albidis : subtus ochraceo-albus, vitta gutturali lata, pectorali angusta et maculis ventris lateralibus, cum rostro et pedibus nigris.

Long. tota 8·0 ; alæ 3·5 ; caudæ 3·3.

Hab. Venezuela (Dyson) ; Trinidad (Lord Harris).

The specific name *bicinctus* is quite sufficient to distinguish this species from all others at present known of this family. Trinidad specimens are among the fine collection of birds from that island presented to the Zoological Society by Lord Harris. Examples in the British Museum were collected by Mr. Dyson in Venezuela.

10. BUCCO RADIATUS, Selater.

Bucco radiatus, Selater, Pr. Zool. Soc. Dec. 13, 1853.

B. supra clare ferrugineus, nigro transversim radiatus : nucha et dorso summo pæne omnino nigris : corpore subtus et

cervicali torque pallide fulvescenti-albis; capitis lateribus pectore et ventris lateribus lineis nigris transversim radiatis: loris gula et ventre medio cum crisso albis: pedibus nigris: rostro plumbeo.

Long. tota 8·0; alæ 3·4; caudæ 3·0.

Hab. in Nova Grenada.

On first seeing this *Bucco* I took it for an immature state of *B. chacuru*, but a more accurate examination has convinced me that it is quite distinct. The present species may be at once distinguished by its lead-coloured bill and radiated under-plumage, as well as by the entire absence of the large black blotches on each side of the neck, which form one of the characteristic features of the latter species. Of two examples in the British Museum, one is labelled as having been received from Santa Fé di Bogota in 1843.

The upper plumage is clear ferruginous brown crossed with regular black bars which are narrower on the head: on the neck and upper back the feathers are nearly wholly black. The under surface of the remiges is buff-coloured; the inner web of the apical half of the primaries is pure pale black. The rectrices are uniform clear brown, paler below and regularly crossed by seven or eight black bands.

11. *BUCCO CHACURU*, Vieill.

Chacuru, Azara, no. 261.

Bucco chacuru, Vieill. Nouv. Dict. d'H. N. iii. 239; Vieill. Enc. d'H. N. p. 1420; Gray's Gen. p. 74; Gray, List of B. M. p. 48.

Capito melanotis, Temm. Pl. Col. 94; Wagl. Syst. Av. sp. 5; Max. Beit. z. Nat. iv. 359; Tsch. Av. Consp. p. 301; Tsch. F. P. p. 259.

Bucco strigilatus, Licht. Verz. d. Doubl. p. 8.

Capito chacuru, Hart. Syst. Ind. Azara, p. 17; Bp. Consp. p. 146.

Capito leucotis, Sw. Orn. Draw. pl. 10; Bp. Consp. p. 147.

Bucco leucotis, Gray's Gen. p. 74.

B. supra brunneo-rufescens nigro conferte fasciolatus; capite nigricantiore: capitis lateribus omnino nigris: loris, regione auriculari, vitta collari postica et corpore toto subtus albis: subtus ad latera subobsolete nigro radiatus: rostro rubro, culmine ad apicem nigro: pedibus nigris.

Long. tota 8·0; alæ 3·3; caudæ 3·0.

Hab. in Brasilia; Bahia (Max.); S. Paolo (Licht.); Peruvia reg. sylv. (Tsch.); Porto Imperiale (Cast. et Dev.); Paraguaya (Azara).

This *Bucco* appears to range farther south than any other species, being the only one included by Azara in his account of the birds of Paraguay. Prince Maximilian of Neuwied says that he "met with it in the bush and wood valleys of the

province of Bahia, yet not often. It is a still, solitary bird, and he never heard its voice. Generally it sits upon a low bough, or hops in the thick bush upon the ground."

The form of the bill in this species is very much compressed, in other respects the general habit of the bird is not far removed from that of the more typical *Bucones*.

12. BUCCO LANCEOLATUS, Deville.

Bucco lanceolatus, Deville, Rev. et Mag. de Zool. 1849, p. 56.

B. supra brunneus: subtus albus nigro longitudinaliter striatus: fronte anguste albo: crisso rufescente.

Long. tota 5.5.

Hab. Pampa del Sacramento in Peruv. (Dev.); Rio Napo (Jardine).

I noted down the preceding short description (which, however, I think is sufficient to identify this peculiar species) when I examined the type-specimen in the Paris Museum. M. Deville's account of it is as follows (see Rev. et Mag. de Zoologie, l. c.): "Above reddish brown, rather brighter on the head, ears and upper tail-coverts; with a narrow terminal band more or less clear upon the back and coverts. Below spotted with white and black; tail brown above, gray below, with two black spots, one at the base and the other nearly at the extremity, which is gray: two medial rectrices brown and without spots: the outer pair of rectrices spotted only on the inner web, the outer web being gray. Crissum cinnamon colour. Length $10\frac{1}{2}$ cent."

Sir William Jardine has an example of this bird received in a collection from the Rio Napo.

13. BUCCO MACULATUS (Gm.).

Alcedo maculata, Gm. S. N. i. p. 451.

Bucco somnolentus, Licht. Verz. d. Doubl. p. 8.

Capito maculatus, Wagl. S. A. sp. 7; Temm. Tabl. Meth. p. 41.

Tamatia somnolenta, Sw. Orn. Draw. pl. 9.

Le Tamajac, Le Vail. Ois. de Par. Suppl. t. F.

Tamatia tamajac, Less. Man. i. p. 168.

Tamatia maculata, Bp. Consp. p. 147.

Bucco maculatus, Gray's Gen. p. 74; Gray, List of B. M. p. 48.

B. supra nigrescens: singulis pennis irregulariter rufescente transversim vittatis; capite obscuriore: loris superciliis et vitta collari rufescentibus: subtus albus; collo antico clare rufescenti-fulvo: mento pure albo: pectore et ventris lateribus maculis rotundis nigris signatis: rostro rubro, culmine et basi nigro: pedibus plumbeis.

Long. tota 7.3; alæ 3.0; caudæ 2.7.

Hab. in Brâsilia; Para; Bahia (Licht.).

This well-known Brazilian species may be recognized by its clear buff-coloured neck and upper breast, and the round spots on the belly. Specimens from Para are in the Derby Museum at Liverpool.

14. *BUCCO STRIATIPLECTUS*, Slater.

B. striatiplectus, Slater in Pr. Zool. Soc. Dec. 13, 1853.

B. supra nigrescens; alis caudaque magis brunnescentibus; omnino rufescente transversim striatus: capite nigro fere immaculato: mento albo, gutture toto et collo undique fulvofus: pectore et ventris lateribus albis, nigro longitudinaliter striatis: ventre medio albo: crisso fulvescente.

Long. tota 7·8; alæ 3·5.

Hab. in Bolivia (Mus. Derb.).

I am rather doubtful, I confess, about this species, whether it is truly distinct from the preceding. The only difference is that the characteristic round black spots on the under surface are in this species replaced by longitudinal striæ. The two examples in the Derby Museum are labelled 'Bolivia.' I have seen several others. I described this and some of the other new species included in the present synopsis in a paper read before the Zoological Society on the 13th December, 1853.

D. *Cyphos* (Spix).

15. *BUCCO MACRODACTYLUS* (Spix).

Cyphos macrodactylus, Spix, Av. Bras. i. t. 39. fig. 2. p. 51.

Capito cyphos, Wagl. S. A. sp. 4; Tsch. F. P. p. 259.

Capito macrodactylus, Bp. Pr. Zool. Soc. 1837, p. 119; Tsch. Av. Consp. p. 300; Bp. Consp. p. 146.

Bucco macrodactylus, Gray's Gen. p. 74.

B. fuliginoso-brunneus; capite rufescente; dorso summo nigrescente; dorsi singulis pennis margine clavioribus: vitta cervicali postica ochracea: mento ochraceo albido: vitta lata gulari nigra subtus albo marginata: ventre tenuissime nigrescente lineato: rostro nigro: pedibus plumbeis.

Long. tota 5·8; alæ 2·7; caudæ 2·4.

Hab. in sylvis fl. Amazonum (Spix); in prov. Peruviae orientilibus (Tsch.); Rio Napo (Jard.); Nova Grenada.

This is certainly rather an abnormal species as regards the form of the bill, which somewhat resembles that of the next succeeding genus, but is much broader at the base. The broad gular bar is situated higher up than in the other species. I have

some doubts whether I am right in placing it here—perhaps, in many respects, it is more nearly allied to *B. tamatia*, &c.

Spix's specimens came from high up the Amazons, I expect, as Tschudi found the bird in Eastern Peru. An example in my collection has every appearance of a Bogota skin.

[To be continued.]

XXXI.—*Observations on the Fauna of Barrackpoore.* By Capt.

ROBERT C. TYTLER, of the 38th Regiment Bengal Light Infantry.

SINCE the following observations will in all probability be uninteresting to most readers, I give them expressly for the assistance and guidance of those who visit Calcutta from foreign ports, and are desirous during perhaps a limited stay to procure specimens of natural history belonging to Bengal, and which frequently without their own personal exertions they are unable to do; I therefore select the fauna of Barrackpoore (a pretty military station) and its immediate vicinity, where I resided for upwards of two years, thus having ample opportunities to render myself tolerably familiar with the birds and small mammalia that belong to or occasionally visit this part of Bengal.

The distance from Calcutta to Barrackpoore is fifteen miles. The road is planted on both sides with tall superb trees, and it is chiefly on this road and its vicinity that I obtained or observed the specimens which form the subject of my observations; other genera and species besides those enumerated by me have been occasionally collected, but these I shall omit mentioning as they did not fall under my immediate observation, and solely confine myself to those that did.

I shall therefore begin with the *Palæornis torquatus*, the common ring-necked green or Mango Parrot of India; it is very common, as well as the elegant red-headed *Palæornis cyanocephalus*; the latter is difficult to obtain, from being so constantly persecuted by native bird-catchers; the females have a bluish-coloured head. The *Palæornis barbatus* is to be had, but very rarely; I only obtained two specimens; besides these three species, I have seen no other of this genus.

I shall now proceed to the Raptores, and commence with the *Hypotriorchis severus*, a beautiful little species and uncommon. *Tinnunculus alaudarius*, which is the same as the European Kestrel, is common. The *Elanus melanopterus* is often met with, as well as *Hæmatornis cheela*; this latter is a noble crested bird, found near marshes, where abundance of the *Circus æruginosus*,